MONTHLY WEATHER REVIEW.

Editor: Prof. CLEVELAND ABBE.

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INTRODUCTION.

The MONTHLY WEATHER REVIEW for August, 1898, is based on about 2,940 reports from stations occupied by regular and voluntary observers, classified as follows: 147 from Weather Bureau stations; numerous special river stations; 32 from post surgeons, received through the Surgeon General, United States Army; 2,583 from voluntary observers; 96 received through the Southern Pacific Railway Company; 29 from Life-Saving stations, received through the Superintendent United States Life-Saving Service; 31 from Canadian stations; 20 from Mexican stations; 7 from Jamaica, W. I. International simultaneous observations are received from a few stations and used, together with trustworthy newspaper extracts and special reports.

Special acknowledgment is made of the hearty cooperation of Prof. R. F. Stupart, Director of the Meteorological Service of the Dominion of Canada; Mr. Curtis J. Lyons, Meteorologist to the Hawaiian Government Survey, Honolulu; Dr. Mariano Bárcena, Director of the Central Meteorological and Magnetic Observatory of Mexico; Mr. Maxwell Hall, Government Meteorologist, Kingston, Jamaica; Capt. S. I. Kimball, Superintendent of the United States Life-Saving Service; and Commander J. E. Craig, Hydrographer, United States Navy.

The REVIEW is prepared under the general editorial supervision of Prof. Cleveland Abbe.

Attention is called to the fact that the clocks and self-registers at regular Weather Bureau stations are all set to seventy-fifth meridian or eastern standard time, which is exactly five hours behind Greenwich time; as far as practicable, only this standard of time is used in the text of the REVIEW, since all Weather Bureau observations are required to be taken and recorded by it. The standards used by the public in the United States and Canada and by the voluntary observers are believed to generally conform to the modern international system of standard meridians, one hour apart, beginning with Greenwich. Records of miscellaneous phenomena that are reported occasionally in other standards of time by voluntary observers or newspaper correspondents are sometimes corrected to agree with the eastern standard; otherwise, the local meridian is mentioned.

FORECASTS AND WARNINGS.

By Prof. F. H. BIGELOW, in charge of Forecast Division.

WIND SIGNALS.

No storm signals were ordered on the Pacific coast and the Great Lakes during August, 1898, and no severe wind storms appeared during the month in the West Indies or over the Caribbean Sea.

Two rather severe storms visited the southeastern coasts of the United States, one passing over western Florida the night of the 2–3d, and the other crossing the Georgia and southern South Carolina coasts the night of the 30th–31st.

The Florida storm first appeared as a feeble disturbance near Jupiter the night of the 1st, and passed thence northwestward to the vicinity of Tampa by the morning of the 2d. Anticipating a development of strength on the part of this disturbance information signals were ordered on the Florida, Alabama, and Louisiana coasts the morning of the 2d, and interests in those sections were telegraphed that "a storm appears to be developing in the east Gulf." That the signals and warnings were warranted and timely is shown by the following report of Mr. A. J. Mitchell, Observer and Section Director, Weather Bureau, Jacksonville, Fla.:

The storm approached the coast in the vicinity of St. Josephs Bay during the evening of the 2d. No marked premonition of an existing disturbance was observed during the early hours of the day. The wind velocity gradually increased from about 8 p. m. of the 2d and continued until 3 or 4 a. m. of the 3d. Near the coast the maximum wind was felt about 2 a. m. from the southeast. The storm track was about 60 miles wide and embraced mainly the section of country between the Choctawhatchee and Apalachicola rivers. Throughout this section great damage was done to crops, turpentine farms, and other property. Three barges, four tug boats, several pile drivers, and a number of sailing craft were sunk, and wharves and dwellings were damaged. The inland progress of the storm was characterized by diminishing force, and the disturbance was practically dissipated before it reached the Alabama line.

During August 27, 28, and 29, a feeble disturbance drifted eastward over the Gulf of Mexico, and on the morning of the 30th there were premonitory signs of a storm formation off the south Atlantic coast. The regular morning and special reports of the 30th located the point of the storm's inception off, and not far distant from, the Georgia coast; although these reports did not indicate the hurricane intensity of the storm over the very limited area it covered, northeast storm signals were ordered, and storm warnings were telegraphed to south Atlantic ports from Jacksonville, Fla., to Norfolk, Va., and the Chief of Bureau of Navigation, Navy Department, was notified of the threatening conditions in that section, during the afternoon of the 30th, twelve hours before the storm center reached the coast line. The greatest wind force was apparently experienced at Tybee Island, where a velocity of 84 miles per hour was recorded about 4:30 a. m. of the 31st. In addition to destruction and damage by wind heavy losses were caused by torrential rains and floods along the Georgia coast, and to river plantations between Augusta and Savannah. The territory ravaged by this storm was confined to Savannah and vicinity, and the following extract from the report of the observer at that point indicates the general